



COMMONWEALTH of VIRGINIA

Department of Health

DIVISION OF SHELLFISH SANITATION

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LOWER MACHODOC CREEK Growing Area #5 Westmoreland County Shoreline Sanitary Survey

Date: February 20, 2004

Survey Period: July 22 - October 7, 2003

Total Number of Properties Surveyed: 1025

Surveyed By: Gary A. Wood

SECTION A: GENERAL

This survey area extends from Reference Point 5 at Kingcopsico Point to Reference Point 6 at Ragged Point, including the Potomac River shoreline between these two points, Lower Machodoc Creek, Herring Pond, Bettys Pond, Cabin Point Creek, Glebe Creek (Weatherall Creek and Aimes Creek), Doyle Cove, Thompson Branch, Jones Branch, Drum Bay, Lee Creek, Mount Pleasant Branch, Hester Cove, Branson Cove, Blackbeard Pond and all of their tributaries.

The area is relatively level throughout the survey area with moderate elevations less than 20' and then rising to a maximum of 50' at the outer edges of the survey boundary. The population is moderate, concentrated primarily in the communities of Cabin Point, Glebe Harbor, Drum Bay Estates, Coles Point and Ragged Point Beach. Many of the homes along the creeks and the Potomac River shores are occupied seasonally.

Meteorological data indicated that 3.29 inches of rain fell during from July 22 through 31, 6.30 inches from August 1 through August 31, 10.25 inches from September 1 through September 30, and 0.00 inches from October 1 through October 7, 2003, for a total of 19.84 inches for the survey period.

A portion of the survey area east of Lower Machodoc Creek and along the Potomac River from Grapevine Point to Ragged Point, is scheduled for sewer service beginning sometime before the end of 2003. This will eliminate approximately 200 properties from the survey area once the sewage treatment plant is operational and these properties are connected to the system.

On September 17, 18 and 19, 2003, Hurricane Isabel brought high winds, tides and more than 3.5 inches of rain to the survey area. Fallen trees and downed power lines interrupted the survey for about 7 days, but there was no apparent wide-spread damage to septic systems.

The current restrictions on shellfish harvesting are Condemned Shellfish Area #83, Lower Machodoc Creek, effective December 18, 2002, and Condemned Shellfish Area #165,

Cabin Point Creek, effective April 27, 1989. Copies of the current condemnation notices and maps are attached to this report.

Information in this report is gathered and used primarily by the Division of Shellfish Sanitation, Virginia Department of Health, in order to fulfill its responsibilities of shellfish growing area supervision and classification. Data in the report are also made available to other agencies participating in shellfish program activities and other interested parties.

Report copies are provided to the local health department for corrective action of deficiencies listed on the summary page in Section B. 2. and B. 3., and the Department of Environmental Quality, Water Regional Office for possible action at properties listed on the summary page in Section B.1.

This report lists only those properties that have a sanitary deficiency or have other environmental significance. Individual field forms with full information on properties listed in this report are on file in the Richmond office of the Division of Shellfish Sanitation and are available for reference until superseded by a subsequent survey of the area.

SECTION B: SEWAGE POLLUTION SOURCES

SEWAGE TREATMENT FACILITIES

- None¹ -

ON-SITE SEWAGE DEFICIENCIES

1. CONTRIBUTES POLLUTION- Location: 144 Herring Lane, Montross, 22572. Owner: Robert L. Walston, III, P.O. Box 1258, Warsaw, 22572. Dwelling- white multiple materials siding 1 story with red trim. 3 persons. Broken 4 inch white pvc pipe between septic tank and distribution box. Effluent to ground surface. Sanitary notice issued 7-22-03 to field #35.
3. CONTRIBUTES POLLUTION - Stephen P. and Gladys Allen, 767 N. Glebe Rd., Montross 22572. Dwelling- gray board and batten 1 story with red shutters and white trim. No contact. Effluent to ground over drain field. Sanitary notice issued 7-30-03 to field #190.
5. CONTRIBUTES POLLUTION - Location: 231 Glebe Harbor Road, Montross 22572. Owner: Estate of Charlie Wright, c/o Dorenda V. Wright, P.O. Box 162, Mt. Holly 22524. Dwelling- gray hardboard siding 1 story with red shutters. No contact. Pit privy full to riser. Sanitary notice issued 8-13-03 to field #382.
6. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) - Location: 3432 Mount Holly Road, Mt. Holly 22524. Owner: Longwood College Foundation, 201 High Street, Farmville 23909. Dwelling- white wood siding 1 story with green shutters with separate bathhouse. No contact. Lavatory drains to ground from ladies room in the bathhouse. Sanitary notice issued 8-13-03 to field #386.

¹ The Coles Point Sewage Treatment Plant, which will serve portions of Growing Areas 5 and 6, was scheduled to open in the late fall of 2003, just after completion of this survey.

12. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) - Location: 211 Cherry Orchard Lane, Montross 22520. Owner: June Herbert, 199 Cherry Orchard Lane, Montross 22520. Dwelling- White wood siding 1 story with white trim. 3 persons. Laundry waste to ground surface at well curbing. Sanitary notice issued 8-21-03 to field #460.
13. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) - Samuel Kilmon, Jr., 346 Cherry Orchard Lane, Montross 22520. Dwelling- Tan vinyl siding 1 story with white trim. No contact. Kitchen waste to ground surface through tan cpvc pipe. Sanitary notice issued 8-21-03 to field #465.
19. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) - Location: 186 Chatham Village Road, Montross 22520. Owner: Life estate of Ruby Clark, c/o Charles D. Clark, 5280 Zacata Road, Montross 22520. Dwelling- Tan vinyl siding 1 story with brown shutters. 2 persons. Unapproved top to grease trap. Sanitary notice issued 8-25-03 to field #480.
20. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) - Bernice Conley, 41 Boyce Point Circle, Montross 22520. Dwelling- white vinyl siding 1 story with white awnings. 1 person. Kitchen waste piped to ground surface through 1 ½ inch white pvc pipe. Sanitary notice issued 8-25-03 to field #498.
21. NO FACILITIES - Margaret M. Johnson, 1097 South Tidwells Road, Montross 22520. Dwelling- Yellow wood siding 1 story with brown trim. 4 persons. No facilities. Portable toilet at residents full. No pump-out agreement. Sanitary notice issued 9-2-03 to field #520.
23. CONTRIBUTES POLLUTION - Charles Wright, 2286 Erica Road, Montross 22520. Dwelling- Tan mobile home with white trim on a red block foundation. 4 persons. Septic tank full to top, top removed and contents pumped to ground surface through a 2 inch black hose. Sanitary notice issued 9-3-03 to field #551.
24. CONTRIBUTES POLLUTION, ***DIRECT*** - Location: 1756 Erica Road, Montross 22520. Owner: Fred E. Dixon 557 Mt. Holly Road, Montross 22520. Dwelling- Tar paper siding 1 story with tan roof. 2 persons. Effluent to ground surface adjacent to drain field. Sanitary notice issued 9-3-03 to field #555.
25. CONTRIBUTES POLLUTION, ***DIRECT*** - Location: 208 Plunk Town Road, Montross 22520. Owner: Life estate of Mary E. Wormley, c/o Louise Dixon, 557 Mt. Holly Road, Montross 22520. Dwelling- White vinyl siding 1 story. 1 person. Effluent to ground at pump chamber and thence to Thompson's Branch. Sanitary notice issued 9-5-03 to field #572.
26. CONTRIBUTES POLLUTION - Location: 167 Plunk Town Road, Montross 22520. Owner: Mary Lee and George Smith, 211 Plunk Town Road, Montross 22520. Dwelling- White mobile home with dark trim. No contact. Vault privy full to riser. Sanitary notice issued 9-5-03 to field #574.
27. CONTRIBUTES POLLUTION - Location: 938 Erica Road, Montross 22520. Owner: Paul and Edith Smith, 1411 Bull Run Drive, Richmond 23231. Dwelling- yellow vinyl siding 1 story with red shutters and white trim. 2 persons. Effluent to ground surface at septic tank. Sanitary notice issued 9-5-03 to field #577.

28. CONTRIBUTES POLLUTION - Martha A. Hall, 886 Erica Road, Montross 22520. Dwelling- Tan vinyl siding 1 story with white trim. No contact. Contents of pit privy to ground surface. Sanitary notice issued 9-5-03 to field #579.
29. CONTRIBUTES POLLUTION, ***DIRECT*** - Occupant: Northern Neck Road Construction & Marine Excavation, 985 Calais Road, Hague 22469. Owner: Garnett Lewis Reamy, P.O. Box 206, Hague 22469. Business- tan steel shop building and white mobile home used as an office. No contact. Effluent to ground from mobile home, thence to an unnamed tributary of Lower Machodoc Creek. Sanitary notice issued 9-10-03 to field #690.
31. CONTRIBUTES POLLUTION - Donnie R. Carroll, 279 Westmoreland Blvd., Hague 22469. Dwelling- white aluminum siding 1 story with white trim. No contact. Effluent to ground surface at septic tank. Sanitary notice issued 9-5-03 to field #609.
33. NO FACILITIES - Location: Hickerson Road at Westmoreland Blvd., Hague 22469. Owner: Patricia Birdsong, 621 Pinehurst Avenue, Colonial Heights 23834. Dwelling- Cedar board and batten 1 story with stone chimney. No contact. No facilities. Portable toilet on property. Sanitary notice issued 9-9-03 to field #655.
34. CONTRIBUTES POLLUTION - Location: 224 Hickerson Road, Hague 22469. Owner: Vivian Hartwell, P.O. Box 236, Hague 22469. Dwelling- Red brick 1 story with white trim and white mobile home attached. 4 persons. Septic tank connection to 4 inch white PVC pipe leaks effluent to ground surface. Sanitary notice issued 9-9-03 to field #650.
38. CONTRIBUTES POLLUTION - Occupant: Tiara Ball, 243 Parham Point Road, Hague 22469. Owner: Stanley R. and Charles Carey, P.O. Box 372, Tappahannock 22560. Dwelling- Red brick and green block 1 story with white trim. 3 persons. Effluent to ground over drain field. Sanitary notice issued 9-15-03 to field #729.
39. CONTRIBUTES POLLUTION - Alexander Johnson, 284 Zena Way, Hague 22469. Dwelling- Yellow hardboard siding 2-story with white trim. No contact. Cracked top to septic tank exposing contents. Garden hose under lid of secondary tank drains contents to ditch, and;

CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) - Open grease trap exposing contents. Sanitary notice issued 9-15-03 to field #726.
40. CONTRIBUTES POLLUTION - Location: 280 Granny's Bar Road, Hague 22469. Owner: Robert L. Luebker, 1712 Waldorf Court, Crofton, MD 21114. Dwelling- White stucco 1 story with black door. No contact. No top to septic tank, exposing contents. Open drain line from septic tank, exposing contents. Sanitary notice issued 9-25-03 to field #848.
41. CONTRIBUTES POLLUTION - John and Michelle V. Costello, 226 Granny's Bar Road, Hague 22469. Dwelling- White vinyl siding 1 story with black shutters. 2 persons. Effluent to ground over drain field. Sanitary notice issued 9-25-03 to field #845.
42. CONTRIBUTES POLLUTION - Deborah Allen, 37 Granny's Bar Road, Hague 22469. Dwelling- White block 1 story with brown trim. No contact. No top to septic tank exposing contents. Sanitary notice issued 9-25-03 to field #857.

51. CONTRIBUTES POLLUTION - Arthur Paul Little, 1218 Salisbury Park Road, Hague 22469. Dwelling- Gray vinyl siding 2-story with white trim. No contact. Broken top to septic tank covered with a metal plate. Sanitary notice issued 10 -2-03 to field #967.
52. CONTRIBUTES POLLUTION - M. Wayne and Katherine B. Gathright, 928 Salisbury Park Road, Hague 22469. Dwelling- white asbestos shingle siding 1 story. No contact. Cracked top to septic tank exposing contents. Sanitary notice issued 10-2-03 to field #952.
53. CONTRIBUTES POLLUTION - Thomas R. Harrison, 770 Salisbury Park Road, Hague 22469. Dwelling- white vinyl siding 1 story with faded blue shutters and red door. No contact. Broken top to septic tank exposing contents. Sanitary notice issued 10-1-03 to field #940.
54. CONTRIBUTES POLLUTION - John S. Thomas, III, 726 Salisbury Park Road, Hague 22469. Dwelling- Light yellow hardboard siding 1 story with white trim. No contact. Open septic tank exposing contents. Sanitary notice issued 10-1-03 to field #937.
55. CONTRIBUTES POLLUTION, ***DIRECT*** - Ronald L. Hall, 252 Salisbury Park Road, Hague 22469. Dwelling- White vinyl siding 1 story. No contact. Effluent to ground over drain field and thence to a ditch and the Potomac River. Sanitary notice issued 9-30-03 to field #907.

POTENTIAL POLLUTION

7. Richard N. & Herdman Lahey, 1983 North Tidwells Road, Montross 22520. Dwelling- Tan asbestos siding 1 ½ story with red brick trim. No contact. Grease trap covered with a sheet of plywood, apparently not in use, but piping still in place.

SECTION C: NON-SEWAGE WASTE SITES

INDUSTRIAL WASTES

15. S & W Seafood, 1605 South Tidwells, Montross 22520. Owner: Richard V. Chatham, 204 Chatham Village Road, Montross 22520. Seafood (crab and oyster) processing plant. Floor drains flow to ditch and thence to Lower Machodoc Creek. Processing waste water drains to a septic tank and is disposed of in a drainfield. Has permit #VASEA 1023.
44. ***DIRECT*** - B & Z Marine, Branson's Cove at the end of SR 679. Owner: B & Z Marine, P.O. Box 66, Coles Point 22442. Commercial boatyard and marine railway. 2 employees. Boat repairs and restorations, including sanding, caulking, painting and refinishing. Waste is washed directly into Branson's Cove.

47. ***DIRECT*** - Allen's Oyster House, 5693 Coles Point Road, Coles Point 22442. Owner: John W. Allen, Jr., Shellstock shipper and packer. Processing waste water drains directly to Branson's Coves. Has permit #VASEA 1037 issued by the Department of Environmental Quality.

SOLID WASTE DUMPSITES

22. James and Delores Usual, 2562 Erica Road, Montross 22520. Business- Auto and truck repair shop. Tan steel building approximately 16 feet high and 24 feet by 50 feet on a 3 acre site. No contact. Present at time of survey and stored on the grounds surrounding the building were 8 junked trucks, 1 tractor, dead batteries, used oil (in three 50 gallon drums) and quantities of miscellaneous scrap metal and building materials. Material covered approximately 2 acres of a 3 acre site.

SECTION D: BOATING ACTIVITY

MARINAS

43. Branson's Cove Marina, 284 Branson's Cove Road, Hague 22469. Owner: B & Z Marine, Inc., P.O. Box 66, Coles Point 22442. Commercial marina. 3 employees. Moorage for 38 vessels. Present at time of survey were 3 pleasure boats less than 19 feet, 5 pleasure boats between 19 and 26 feet, and 2 pleasure boats between 26 and 39 feet. Present in dry storage were 1 pleasure boat less than 19 feet and 1 pleasure boat between 19 and 26 feet. Boating services provided are restaurant with some groceries, fuel, ramp, electricity and water. Sanitary facilities are 1 commode for men, 1 lavatory for men, 1 commode for women, 1 lavatory for women and 1 shower for use by either gender. Dump station and pump out are available. Waste disposal is in a drainfield that appeared to be in good working order at inspection.
45. North Point Marina, Branson's Cove, Coles Point 22442. Owner: John W. Allen, Jr., 5693 Coles Point Road, Coles Point 22442. Commercial marina. 1 employee. Moorage for 20 vessels; dry storage for 40 vessels. Present at time of survey were 4 pleasure boats between 19 and 26 feet and 2 pleasure boats between 26 and 39 feet; in dry storage there were 6 pleasure boats less than 19 feet and 17 pleasure boats between 19 and 26 feet. A boat repair shop is the only boating service provided. Sanitary facilities are one vault privy for men and one vault privy for women, and one dump station.

OTHERS PLACES WHERE BOATS ARE STORED

2. Cabin Point Community Boat Ramp, Boat Ramp Road, Cabin Point. Owner: Cabin Point Property Owners Association, Montross 22520. Community boat ramp with two finger piers for use of Cabin Point property owners and their guest. No contact. 2 moorings. No boats present at time of survey. Boating services are water and trash disposal. Sanitary facilities are 1 vault privy for men and 1 vault privy for women.

4. Glebe Point/Cabin Point Community Boat Ramp, Osprey Drive. Owner: Glebe Point/Cabin Point Property Owners Association, Montross 22520. Community boat ramp with two piers for use of Cabin Point and Glebe Point property owners and their guests. No contact. 2 moorings. No boats present at time of survey. Boating services are water and trash. No sanitary facilities are provided.
8. Crab shed and pier, off Route 650 in Tidwells. Owners: Alfred and Stanley Chatham, 21046 Kings Highway, Montross 22520. Crab shed and pier. No contact. 4 moorings. Present at time of survey were 1 work boat less than 19 feet and one work boat between 19 and 26 feet. No other services provided.
9. Abandoned seafood processing plant, 313 Oyster House Road. Owner: Daiger Brothers Seafood. No contact. Moorage for 8 boats along bulkhead. No boats present at survey. No boating services are available at this abandoned site. Sanitary facilities are 4 privies, none of which appear to have been recently used.
10. Abandoned seafood processing plant, 315 Oyster House Road. Owner: Chatham Seafood, Montross. No contact. Moorage for 6 vessels along bulkhead. Present at the time of survey was 1 work boat less than 19 feet. A ramp is the only boating service available. No sanitary facilities are available. This site is apparently being used to offload crabs.
11. Crab shed and pier adjacent to 151 St. James Lane, Tidwells. Owners: Richard Wade and Jessie Chatham, P.O. Box 204, Montross 22520. Crab shed and pier. No contact. Moorage for 8 vessels. Present at time of survey were 2 work boats between 19 and 26 feet. No boating services or sanitary facilities are provided.
13. Samuel Kilmon Seafood, 346 Cherry Orchard Land, Montross 22520. Crab shed, inactive oyster house and pier. No contact. 3 moorings. No vessels present at survey. No boating services or sanitary facilities are provided.
16. Johnson Seafood, 155 Boyce Point Circle Road, Montross 22520. Owner: James Leroy Johnson, 2744 Oldham Road, Hague 22469. White block 1 story seafood processing plant (inactive) and pier. No contact. 6 moorings. No vessels present at inspection. No services or sanitary facilities provided.
17. Chatham Seafood, end of SR 667 (Chatham Village Road). Owner: James B. Miller, 8505 Grisby Drive, Springfield 22151. Crab unloading dock. No contact. 4 moorings. No boats present at survey. No boating services or sanitary facilities available.
18. K & J Marine, adjacent to 351 Chatham Village Road. Owner: Jimmy L. Hall, 9115 James Madison Highway, Warrenton, 20817. No contact. 6 moorings. Present at time of survey were 2 pleasure boats between 26 and 39 feet and 1 pleasure boat greater than 49 feet. Boating services are water and electricity. A marine railway at this property is currently in a state of disrepair. Sanitary facilities are 1 commode, 1 lavatory and 1 shower for men and 1 commode, 1 lavatory and 1 shower for women; and a dump station. Waste disposal is in a drainfield that appeared to be in good operating condition at inspection.

30. Calais waterfront ramp and pier, end of Holiday Lane off SR 701. Owner: Calais Waterfront Civic Association, P.O. Box 77, Hague 22469. Ramp and pier for use of civic association members and guest. No contact. No vessels present at time of survey. No other services provided.
32. Drum Bay Marina, adjacent to 44 Drum Bay Lane, Hague 22469. Owner: Drum Bay Property Owners Association. Pier for use of Drum Bay Estates property owners and guest. No contact. 30 moorings. Present at the time of survey were 4 pleasure boats less than 19 feet. Ramp and trash receptacle are the only services provided.
44. B & Z Marine, Branson's Cove at the end of SR 679. Owner: B & Z Marine, P.O. Box 66, Coles Point 22442. Commercial boatyard and marine railway. 2 employees. 6 moorings. Present at time of survey were 1 work boat between 26 and 39 feet; in dry storage was 1 work boat between 19 and 26 feet and one commercial boat on the railway greater than 49 feet. Sanitary facilities are 1 commode and 1 lavatory. Waste disposal is to a drainfield that appeared in good working order at inspection.
46. Coles Point Harbor, 5635 Coles Point Road, Coles Point 22442. Owner: Kenneth Payne, Tappahannock 22560. Commercial boat dock. No contact. 25 moorings. Present at time of survey were 3 pleasure boats greater than 39 feet. Boating services are a ramp, water and electricity. Sanitary facilities are 1 vault privy for men and 1 vault privy for women. A dump station is available.
47. Allen's Oyster House, 5693 Coles Point Road, Coles Point 22442. Owner: John W. Allen, Jr., Shellfish shipper and packer. 4 employees. 10 moorings. Present at time of survey were 4 work boats; 1 greater than 49 feet, 1 26 to 39 feet and 1 19 to 26 feet. Services include water, limited electrical and water hookups. Sanitary facilities include two portable toilets and a dump station.
48. Crab shed, adjacent to 271 Old Post Office Lane, Coles Point 22442. Owner: Jame E. Allen. Crab shed adjacent to a blue and gray wood panel 1 story building with an unknown use, but possibly storage. No contact. 15 moorings. Present at time of survey was 1 work boat between 19 and 26 feet. Ramp and portable toilet available adjacent to the building, but no other services are provided.
49. Watermans Pier. Coles Point 22442 (End of state Route 687). Owner: Doug Jenkins, P.O. Box 741, Warsaw 22572. Commercial pier. No contact. 8 moorings. No vessels present at inspection. No facilities provided.

UNDER SURVEILLANCE

-None-

Section E: CONTRIBUTES ANIMAL POLLUTION

14. **Direct** - Julian Barrett, 1618 South Tidwells Road, Montross 22520. Dwelling- White vinyl sided 2-story with gray shutters. No contact. Present at the time of survey were 30 head of cattle and 30 free range chickens. A ditch through the pasture leads to Lower Machodoc Creek through a small marsh. The distance from the fence line to the marsh is approximately 50 feet at 30 feet of elevation. Mature rots in the field.

35. **Direct** - Helen Durham Dull, 296 Drum Bay Road, Hague 22469. Agriculture- fenced pasture. No contact. Present at the time of survey were 20 goats with direct access to Jones Branch of Lower Machodoc Creek. Manure rots in field.
36. Location: 730 Coles Point Road, Hague 22469. Owner: Annette N. Fairfax, 744 Coles Point Road, Hague 22469 Agriculture - fenced pasture. No contact. Present at the time of survey were 8 head of cattle. Manure rots in field approximately 10 yards from a small intermittent stream flowing to the Lower Machodoc.
37. **Direct** - Helen Durham Dull, 296 Drum Bay Road, Hague, 22469. Agriculture- fenced pasture. No contact. Present at time of survey were 36 head of cattle with direct access to Mt. Pleasant Branch. Manure rots in fields.
50. Location: 5983 Coles Point Road, Montross 22520. Owner: Gregory A. Foster, 15702 Scout Camp Road, Hugessville, MD 20637. Dwelling- white vinyl siding 1 story with black trim. No contact. Present at time of survey were 25 cattle, 25 goats, and 10 horses. Manure rots in field approximately .25 miles from the Potomac River.

SUMMARY

AREA 5
LOWER MACHODOC CREEK
February 20, 2004

SECTION B: SEWAGE POLLUTION SOURCES

1. SWEAGE TREATMENT FACILITIES

- 0 - DIRECT - None
- 0 - INDIRECT - None
- 0 - B.1. TOTAL

2. ON-SITE SEWAGE DEFICIENCIES

Correction of deficiencies in this section is the responsibility of the local health department.

- 4 - CONTRIBUTES POLLUTION, DIRECT - #24, 25, 29, 55
- 18 - CONTRIBUTES POLLUTION, INDIRECT - #1, 3, 5, 23, 26, 27, 28, 31, 34, 38, 39, 40, 41, 42, 51, 52, 53, 54
- 0 - CP(Kitchen or Laundry Wastes), Direct - None
- 6 - CP(Kitchen or Laundry Wastes), Indirect - #6, 12, 13, 19, 20, 39
- 0 - NO FACILITIES, DIRECT - None
- 2 - NO FACILITIES, INDIRECT - #21, 33
- 30 - B.2. TOTAL

3. POTENTIAL POLLUTION -

Periodic surveillance of these properties will be maintained to determine any status change.

- 1 - POTENTIAL POLLUTION - #7

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES

- 2 - DIRECT - #44, 47
- 1 - INDIRECT - #15
- 3 - C. 1. TOTAL

2 SOLID WASTE SITES

- o - DIRECT - None
- 1 - INDIRECT - #22
- 1 - C. 2. TOTAL

SECTION D: BOATING ACTIVITY

- 2 - MARINAS - #43, 45
- 17 - OTHER PLACES WHERE BOATS ARE MOORED - #2, 4, 8, 9, 10, 11, 13, 16, 17, 18, 30, 32, 44, 46, 47, 48, 49
- 0 - UNDER SURVEILLANCE - None
- 19 - D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

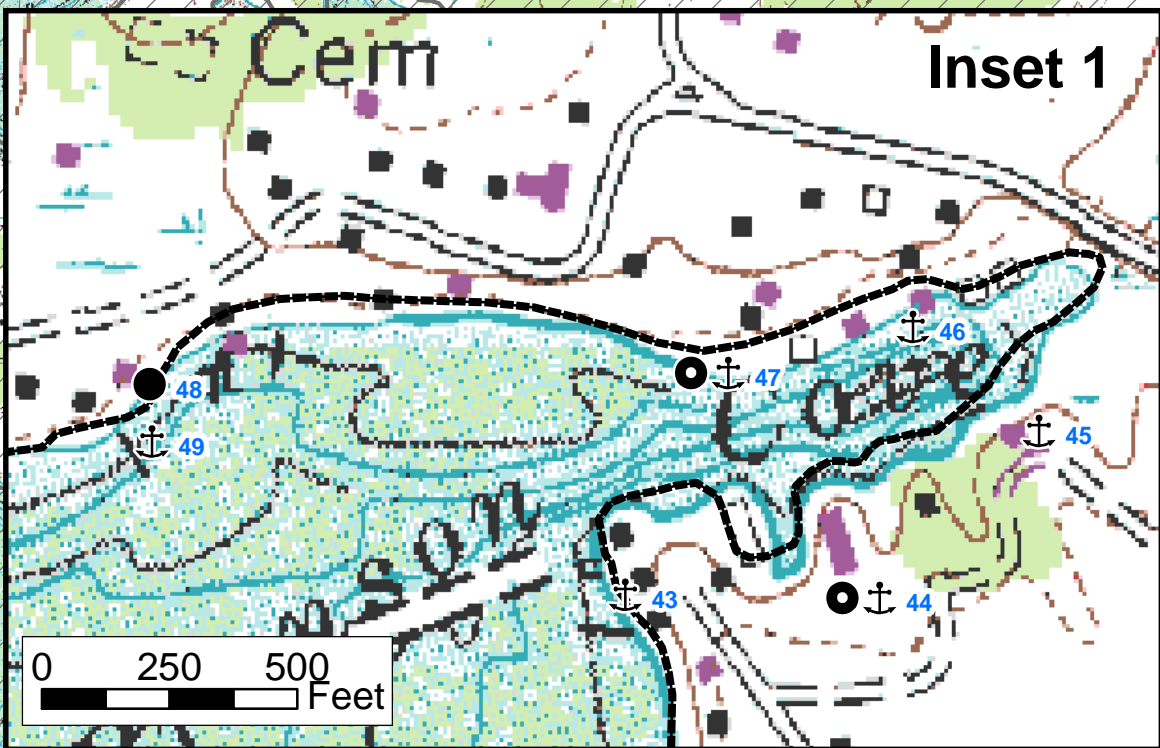
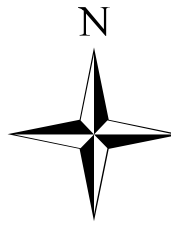
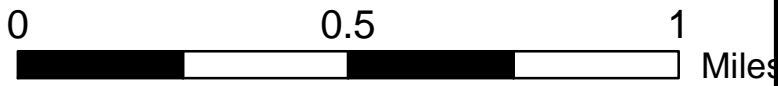
- 3- DIRECT - #14, 35, 37
- 2 - INDIRECT - #36, 50
- 5 - E. TOTAL

Virginia Department of Health
Division of Shellfish Sanitation

Lower Machodoc Creek
5
Shoreline Sanitary Survey

Westmoreland County

Date: February 20, 2004
Survey By: G.A. Wood
Number of Properties Surveyed: 1025



Legend

Shoreline Survey Deficiencies

POLLUTION TYPE

- ★ Sewage Treatment Facility - Direct
- ★ Sewage Treatment Facility - Indirect
- Contributes Pollution - Direct
- Contributes Pollution - Indirect
- ▲ Contributes Pollution (Kitchen or Laundry wastes) - Direct
- ▲ Contributes Pollution (Kitchen or Laundry wastes) - Indirect
- No Facilities - Direct
- No Facilities - Indirect
- ◆ Potential Pollution
- Industrial Wastes - Direct
- Industrial Wastes - Indirect
- Solid Waste Dumpsite - Direct
- Solid Waste Dumpsite - Indirect
- ⚓ Boating Activity
- A Contributes Animal Pollution - Direct
- A Contributes Animal Pollution - Indirect

TYPE

- ▨ Sewered areas

